

Electronic Filing System (EFS) Data

Electronic Patent Application Submission

USPTO Use Only

EFS ID: 11703
Application ID: 09681891
Title of Invention: THICK FILM HEATER
INTEGRATED WITH LOW
TEMPERATURE COMPONENTS
AND METHOD OF MAKING THE
SAME
First Named Inventor: Hongy Lin
Domestic/Foreign Application: Domestic Application
Filing Date: null
Effective Receipt Date: 2001-06-21 
Submission Type: Utility Patent Filing
Filing Type: new-utility
Confirmation Number: 0
Attorney Docket Number: 13558-51
Digital Certificate Holder: cn=Matthew A. Rosenberg, ou=Registered Attorneys, ou=Patent
and Trademark Office, ou=Department of Commerce, o=U.S.
Government, c=US
Certificate Message Digest: bXkuOu8NGJJlz8oDAPiKVw==
Total Fees Authorized: \$858.0

Payment Category: DA - Deposit Account
Deposit Account Number: 501572
Deposit Account Name: Matthew A. Rosenberg

jc474 U.S. PRO
09/681891
06/21/01



TRANSMITTAL FORM

Electronic Version 1.0.2

Stylesheet Version: 1.0

Attorney Docket Number: 13558-51

THICK FILM HEATER INTEGRATED WITH LOW TEMPERATURE COMPONENTS AND METHOD OF MAKING THE SAME

First Named Inventor: Hongy Lin

SUBMITTED BY

Name: Matthew A. Rosenberg Esq.
Registration Number: 40,149
Electronic Signature
Mark: /matthew a rosenberg/ Date Signed: 20010621

I certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.

I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.

Attached Files:

| | |
|------------------|------------------|
| specification | lowtemp.xml |
| bibd-transmittal | 13558-51apds.xml |

| | |
|-------------------|------------------|
| declaration | lowtemp-dec1.tif |
| declaration | lowtemp-dec2.tif |
| declaration | lowtemp-ass1.tif |
| declaration | lowtemp-ass2.tif |
| declaration | lowtemp-ass3.tif |
| declaration | lowtemp-dec3.tif |
| fee-transmittal | 13558-51fee.xml |
| patent-assignment | 13558-51asgn.xml |

Attached Image File(s):

lowtemp-dec1.tif
lowtemp-dec2.tif
lowtemp-ass1.tif
lowtemp-ass2.tif
lowtemp-ass3.tif
lowtemp-dec3.tif

Comments:

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

As the below named inventor(s), I/we declare that:

This declaration is directed to:

The attached application, or
 Application No. _____, filed on _____
 as amended on _____ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

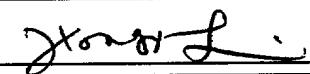
I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and

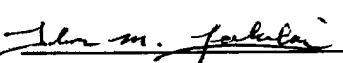
All statements made herein of my/own knowledge are true, all statements made herein on information believed are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and jeopardize the validity of the application or any patent issuing thereon.

FULL NAME OF INVENTOR(S)

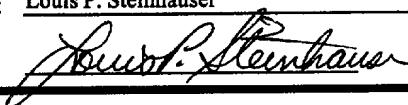
Inventor one: Hongy Lin

Signature:  Citizen of: United States

Inventor two: Thomas M. Laskowski

Signature:  Citizen of: United States

Inventor three: Louis P. Steinhauser

Signature:  Citizen of: United States

Inventor four:

Signature: _____ Citizen of: _____

Additional inventors are being named on _____ additional form(s) attached hereto.

Burden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 C.F.R. 1.63. The information is used by the public to file (and to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 C.F.R. 1.14. This form is estimated to take 1 minute to complete. This time is depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

CERTIFICATE UNDER 37 CFR 3.73(b)Applicant: Hongy Lin et al.Application No.: _____ Filed: herewithEntitled: THICK FILM HEATER WITH INTEGRATED LOW TEMPERATURE COMPONENTS AND METHOD OF MAKING THE SAME

Watlow Electric Manufacturing Company, a Missouri corporation
 (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency)

certifies that it is:

1. the assignee of the entire right, title, and interest-, or
2. an assignee of an undivided part interest

in the patent application identified above by virtue of either:

A. An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel _____ Frame _____ or for which a copy thereof is attached.

OR

B. A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown

1. From: _____ To: _____
 The document was recorded in the Patent and Trademark Office at
 Reel _____, Frame _____ or for which a copy thereof is attached.
2. From: _____ To: _____
 The document was recorded in the Patent and Trademark Office at
 Reel _____, Frame _____ or for which a copy thereof is attached.
3. From: _____ To: _____
 The document was recorded in the Patent and Trademark Office at
 Reel _____, Frame _____ or for which a copy thereof is attached.

[] Additional documents in the chain of title are listed on a supplemental sheet.

Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

6/18/2001
 Date


 Signature

Louis P. Steinhauser

Typed or printed name

Director of Corporate R & D

Title

| | |
|----------------------------------|--------------------------|
| ASSIGNMENT OF APPLICATION | Docket Number (Optional) |
| | 13558-51 |

Whereas, I/We, Hongy Lin of Chesterfield, MO, hereafter referred to as applicant, have invented certain new and useful improvements in THICK FILM HEATER INTEGRATED WITH LOW TEMPERATURE COMPONENTS AND METHOD OF MAKING THE SAME

for which an application for a United States Patent was filed on _____
Application Number / _____

for which an application for a United States Patent was executed on 6/18/01 I and

Whereas, Watlow Electric Manufacturing Co. of St. Louis, Missouri herein referred to "assignee" whose mailing address is 12001 Lackland is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of ten dollars (\$10.00), the receipt whereof acknowledged, and other good and valuable consideration, I/We, the applicant(s), by these presents do assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I/We hereby authorize and request the Commissioner of Patent and Trademarks to issue a United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had the assignment and sale not been made.

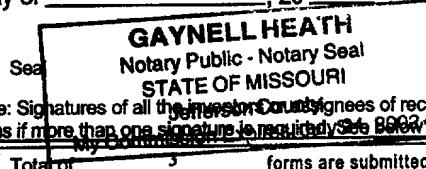
Executed this 18th day of June, 2001
at St. Louis, Missouri



(Signature)

State of Missouri)

SS:

County of St. Louis)Before me personally appeared said Hongy Linand acknowledged the foregoing instrument to be his free act and deed this 18thday of June, 2001

(Notary Public)


 Total of 3 forms are submitted.

Burden Hour Statement: This form is estimated to take 0.1 hours to complete. Time will vary depending upon the needs of the individual case. Any comments or suggestions for simplification of this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner of Patents and Trademarks, Washington, DC 20231.

| | |
|----------------------------------|--------------------------|
| ASSIGNMENT OF APPLICATION | Docket Number (Optional) |
| | 13558-51 |

Whereas, I/We, Thomas M. Laskowski of Pacific, MO, hereafter referred to as applicant, have invented certain new and useful improvements in THICK FILM HEATER INTEGRATED WITH LOW TEMPERATURE COMPONENTS AND METHOD OF MAKING THE SAME

for which an application for a United States Patent was filed on _____
Application Number _____ / _____

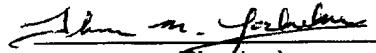
for which an application for a United States Patent was executed on 6/18/01 and

Whereas, Watlow Electric Manufacturing Co. of St. Louis, Missouri herein referred to "assignee" whose mailing address is 12001 Lackland is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of ten dollars (\$10.00), the receipt whereof acknowledged, and other good and valuable consideration, I/We, the applicant(s), by these presents do s assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I/We hereby authorize and request the Commissioner of Patent and Trademarks to issue a United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his s use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had the assignment and sale not been made.

Executed this 18 day of June, 2001
at St. Louis, Missouri

State of Missouri) SS:
County of St. Louis)


(Signature)

Before me personally appeared said Thomas M. Laskowski

and acknowledged the foregoing instrument to be his free act and deed this 18th

day of June, 2001

Seal

GAYNELL HEATH

Notary Public - Notary Seal

STATE OF MISSOURI

Jefferson County

(Notary Public)

Note: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one assignee. My Commission Expires July 14, 2002

Total of 3 forms are submitted.

Burden Hour Statement: This form is estimated to take 0.1 hours to complete. Time will vary depending upon the needs of the individual case. Any comments or suggestions concerning this estimate or any questions concerning this form may be addressed to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner of Patents and Trademarks, Washington, DC 20231.

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| ASSIGNMENT OF APPLICATION | Docket Number (Optional) |
|---------------------------|--------------------------|
| | 13558-51 |

Whereas, I/We, Louis P. Steinhauser of St. Louis, MO, hereafter referred to as applicant, have invented certain new and useful improvements in THICK FILM HEATER INTEGRATED WITH LOW TEMPERATURE COMPONENTS AND METHOD OF MAKING THE SAME

for which an application for a United States Patent was filed on _____
Application Number _____ / _____

for which an application for a United States Patent was executed on 6/18/01 I and

Whereas, Watlow Electric Manufacturing Co. of St. Louis, Missouri herein referred to "assignee" whose mailing address is 12001 Lackland is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of ten dollars (\$10.00), the receipt whereof acknowledged, and other good and valuable consideration, I/We, the applicant(s), by these presents do assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I/We hereby authorize and request the Commissioner of Patent and Trademarks to issue a United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had the assignment and sale not been made.

Executed this 18th day of June, 2001
at St. Louis, Missouri

State of Missouri) SS:
County of St. Louis)

(Signature)

Before me personally appeared said Louis P. Steinhauser

and acknowledged the foregoing instrument to be his free act and deed this 18th

day of June, 2001

GAYNELL HEATH

Notary Public - Notary Seal

STATE OF MISSOURI

Seal Jefferson County

(Notary Public)

Note: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required. See below.

Total of 3 forms are submitted.

Burden Hour Statement: This form is estimated to take 0.1 hours to complete. Time will vary depending upon the needs of the individual case. Any comments or time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner of Patents and Trademarks, Washington, DC 20231.

Please type a plus sign (+) inside this box->

PTO/SB/81 (11-96)

Approved for use through 6/30/99. OMB 0651-003!

Patent and Trademark Office- U S DEPARTMENT OF COMMERCE
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**POWER OF ATTORNEY OR
AUTHORIZATION OF AGENT,
NOT ACCOMPANYING
APPLICATION**

| | |
|------------------------|------------------|
| Application Number | unknown |
| Filing Date | herewith |
| First Named Inventor | Hongy Lin et al. |
| Group Art Unit | unknown |
| Examiner Name | unknown |
| Attorney Docket Number | 13558-51 |

I hereby appoint:

Practitioners at Customer Number

25,716

Customer Number Bar Code Label

OR

Practitioner(s) named below:

| Name | Registration Number |
|------|---------------------|
| | |
| | |
| | |
| | |

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the Patent and Trademark Office connected therewith.

Please change the correspondence address for the above- identified application to:

The above-mentioned Customer Number.

OR

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|---|-------|-----|--|
| <input type="checkbox"/> Firm or Individual Name | | | |
| Address | | | |
| Address | | | |
| City | State | ZIP | |
| Country | | | |
| Telephone | Fax | | |

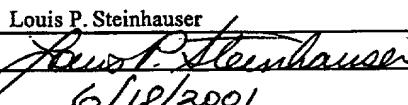
I am the:

Applicant.

Assignee of record of the entire interest

Certificate under 37 CFR 3.73(b) is enclosed

SIGNATURE of Applicant or Assignee of Record

| | |
|-----------|---|
| Name | Louis P. Steinhauer |
| Signature |  |
| Date | 6/18/2001 |

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FEE TRANSMITTAL

Electronic Version 1.0.4

Stylesheet Version: 1.0

Patent fees are subject to annual revisions on or about October 1st of each year.

Large Entity

TOTAL FEES AUTHORIZED: \$ 858

The commissioner is hereby authorized to charge indicated processing and/or publication fees and credit any overpayments to:

Deposit Account Number: 501572

Deposit Account Name: Blumenfeld, Kaplan & Sandweiss, P.C.

Charge Any Additional Fee Required Under 37 C.F.R. Sections 1.16 and 1.17.

SUBMITTED BY

Authorized Name: Matthew A. Rosenberg

Electronic Signature Mark: /matthew a rosenberg/

Date Signed: 20010621

BASIC FILING FEE

| Fee Description | Fee Code | Fee Paid |
|--------------------|----------|----------|
| Utility Filing Fee | 101 | \$ 710 |

Subtotal For Basic Filing Fee: \$ 710

EXTRA CLAIM FEES

| | Fee Code | Fee | Extra Claims | Fee Paid |
|-----------------------|----------|-------|--------------|----------|
| Total Claims: 26 | 103 | \$ 18 | 6 | \$ 108 |
| Independent Claims: 2 | 102 | \$ 80 | 0 | \$ 0 |

Subtotal For Extra Claims Fees: \$ 108

ADDITIONAL FEES

| Fee Description | Fee Code | Fee Paid |
|---|----------|----------|
| Recording Each Patent Assignment Per Property Fee | 581 | \$ 40 |

Subtotal For Additional Fees: \$ 40